

## **CLAIMS**

**What is claimed is:**

1. An image chromatism compensation method for adjusting image dispersion distances in all channels of an image captured by an image capturing device to achieve  
5 image chromatism compensation, the method comprising the steps of:

capturing a reference mark image;  
  
obtaining an image dispersion distance between two reference marks in a predetermined channel of the reference image;  
  
computing a image dispersion calibration ratio; and  
  
10 storing the image dispersion calibration ratio.

2. The method of claim 1, wherein the image capturing device is a scanner.  
  
3. The method of claim 1, wherein the image capturing device is a digital camera.  
  
4. The method of claim 1, wherein the reference image contains at least two reference marks.

15 5. The method of claim 1, wherein the reference image is obtained from a calibration sheet with at least two reference marks.

6. The method of claim 1, wherein the reference image is obtained from the calibration sheet with at least two reference marks in the image capturing device.

20 7. The method of claim 1, wherein the predetermined channel is selected from the group consisting of an R channel, a G channel, and a B channel.

8. The method of claim 1, wherein the image dispersion calibration ratio is:

1 : (distance between the two reference marks in the predetermined channel) /  
(distance between the two reference marks of first other channel) : (distance  
between the two reference marks in the predetermined channel) / (distance  
between the two reference marks of second other channel); wherein the  
5 distances are measured in units of pixels.

9. The method of claim 8, wherein the first other channel and the second other  
channel refer to the channels in the RGB channels that are different from the predetermined  
channel.

10. The method of claim 1 being carried out when the image capturing device powers  
10 on for calibration.